

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1-26. (Canceled)

27. (Original) A ~~The server computer of claim 26, further comprising:~~
a memory for storing programs and data;
a processor for executing programs;
a program, stored in the memory and executable by the processor, for
transmitting, responsive to a request therefor, a parent file containing a logical
reference uniquely identifying a desired file independently of a network address, the
program being capable of modifying the parent file by inserting a list of electronic
addresses corresponding to the logical reference contained in the parent file before
transmitting the parent file to the client;
a second program for modifying the parent file by inserting a reference to a
program for selecting a server upon a request for a certain desired file identified by a
logical reference before transmitting the parent file to the client;
a third program for identifying a status of each server identified in each
electronic address in the replication directory as either a parent or child of the server
in a genealogy tree representing servers storing the file; and
a fourth program for tracking the server's load and to autonomously
determine when, on the basis of the server's load, to delete one of the server's files,

to delete the file, to update the server's replication directory to remove the electronic address of the file on the server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories;

wherein the server stores in the memory a replication directory associating logical references to files with electronic addresses of the files stored on a plurality of servers, the list of electronic addresses being excerpted from the replication directory.

28. (Original) The server of claim 27, further comprising a fifth program for tracking the server's load and to autonomously determine when, on the basis of the server's load, to create or delete a replica of one of the server's files on another server, to create or delete a replica on another server, to update the server's replication directory to add or delete the electronic address of the file on the other server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories.

29. (Original) The server of claim 28, further comprising a sixth program for updating the status of a server in the replication directory from child status to parent status when the server computer deleting the file is a root of the genealogy tree.

30. (Original) The server of claim 29, further comprising a seventh program for batching several updates into a single update request.

31. (Original) The server of claim 30, further comprising a eighth program for transmitting to another server, along with an update request, a local timestamp indicating the time at which an update to the server's replication directory was made, the other server receiving and retaining a record of the timestamp and updating the replication directory if the last received timestamp is more recent that the retained timestamp.

32. (Original) The server of claim 31, further comprising a ninth program for retaining the timestamp for a limited period of time, the other server updating the replication directory if a timestamp is received along with an update request and no timestamp is then retained by the other server.

33-36. (Canceled)